Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (currently amended) A call admission control method in an ATM switch, comprising the steps of:
 - [[a)]] receiving a QoS (Quality of Service) specified connection request;
- [[b)]] calculating an assigned bandwidth on a link associated with the QoS-specified connection request;
- [[c)]] calculating an <u>estimated average</u> bandwidth to be assigned to [[an]] existing QoS-unspecified traffic on the link associated with the QoS-specified connection request; and
- [[d)]] determining whether the QoS-specified connection request is accepted[[,]] based on a combination of the assigned bandwidth and the estimated average bandwidth.
- 2. (currently amended) The call admission control method according to claim 1, wherein in the step (c) when calculating an average bandwidth, the estimated average bandwidth on the link is obtained based on an average QoS-unspecified traffic of each QoS-unspecified virtual connection existing on the link associated with the QoS-specified connection request.
- 3. (currently amended) The call admission control method according to claim 2, wherein the average QoS-unspecified traffic is calculated by adding up existing QoS-unspecified traffics traffic obtained at predetermined sampling time intervals.

- 4. (currently amended) The call admission control method according to claim 1, wherein the step (c) calculating an average bandwidth comprises the steps of:
- [[c.1)]] adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals to produce a first average QoS-unspecified traffic;
- [[c.2)]] sequentially storing a first average QoS-unspecified traffic each time a corresponding QoS-unspecified connection is established at the ATM switch; and
- [[c.3)]] calculating the <u>estimated average</u> bandwidth by averaging a predetermined number of <u>the stored</u> first average QoS-unspecified <u>traffic</u> traffics stored.
- 5. (currently amended) The call admission control method according to claim 1, wherein the step (d) determining whether the QoS-specified connection request is accepted comprises the steps of:
- [[d.1)]] adding the assigned bandwidth and the estimated average bandwidth to produce [[an]] a currently assigned bandwidth in the link;
- [[d.2)]] calculating an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link; and
- [[d.3)]]determining whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.
- 6. (currently amended) A call admission control system in an ATM switch having a plurality of links connected thereto, comprising:

a traffic monitor for monitoring a QoS-unspecified traffic for each QoS-unspecified connection existing on each link;

a memory for storing a cell traffic management table containing an average QoSunspecified traffic for each QoS-unspecified connection existing on each link; and

a call admission manager for calculating an estimated bandwidth by adding up average QoS-unspecified traffics traffic for all existing QoS-unspecified connections on a link associated with a QoS-specified connection request, wherein the estimated bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections on the link, and determining whether the QoS-specified connection request is accepted[[,]] based on a combination of the estimated bandwidth and an assigned bandwidth that is already assigned in the link.

- 7. (currently amended) The call admission control system according to claim 6, wherein an average QoS-unspecified traffic is calculated by adding up existing QoS-unspecified traffics traffic obtained at predetermined sampling time intervals.
- 8. (currently amended) The call admission control method according to claim 6, wherein the call admission manager adds the assigned bandwidth and the estimated bandwidth to produce [[an]] a currently assigned bandwidth in the link, calculates an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link, and determines whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.

9. (currently amended) A call admission control system in an ATM switch having a plurality of links connected thereto, comprising:

a traffic monitor for monitoring a QoS-unspecified traffic for each QoS-unspecified connection existing on each link;

a calculator for adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals to produce a first average QoS-unspecified traffic, [[,]] and calculating [[the]] an estimated bandwidth by averaging a predetermined number of the first average QoS-unspecified traffic traffics stored for existing QoS-unspecified connections on a link associated with a QoS-specified connection request, where the estimated bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections on the link;

a memory for storing a cell traffic management database sequentially containing a first average QoS-unspecified traffic each time a QoS-unspecified connection is established at the ATM switch; and

a call admission manager for calculating an estimated bandwidth by adding up first average QoS unspecified traffics for all existing QoS unspecified connections on a link associated with a QoS specified connection request, wherein the estimated bandwidth is a bandwidth to be assigned to the existing QoS unspecified connections on the link, and determining whether the QoS-specified connection request is accepted[[,]] based on a combination of the estimated bandwidth and an assigned bandwidth that is already assigned in the link.

10. (currently amended) The call admission control method according to claim 9, wherein the call admission manager adds the assigned bandwidth and the estimated bandwidth to produce [[an]] a currently assigned bandwidth in the link, calculates an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link, and determines whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.